**Listing of Claims:**

1. (Currently Amended) An interlayer for placement on a paved surface, comprising a mixture of:

aggregate comprised of no more than about 15% by weight natural sand, wherein said aggregate is comprised of about **[[50]]** 80% by weight to about **[[99.8]]** 100% by weight aggregate having a sieve size of less than about 4.75 mm; and

an asphalt binder, wherein said interlayer has a Hveem Stability at 60°C and 50 gyrations of at least about 22 and a Flexural Beam Fatigue of at least about 50,000 cycles at 2000 micorstrains, 10 Hz, 3.0 ± 2.0% air voids, at 0-30°C.

2. (Previously Presented) The interlay of claim 1, wherein said asphalt binder is a polymer modified asphalt binder.

3. (Previously Presented) The interlayer of claim 1, wherein said interlayer is about 0.5 to 2 inches thick on a paved surface.

4. (Previously Presented) The interlayer of claim 1, wherein said binder is chosen based on the temperature associated with the regional climate.

5. (Previously Presented) The interlayer of claim 1, wherein said binder is chosen from a Type I binder for Northern Type I climates, a Type II Binder for Central Type II climates, and a Type III binder for Southern Type III climates.

6. (Previously Presented) The interlayer of claim 1, wherein said interlayer is substantially impermeable.

7. (Previously Presented) The interlayer of claim 1, wherein said aggregate is comprised of no more than about 10% by weight natural sand.

8. (Previously Presented) The interlayer of claim 1, wherein said aggregate is comprised of no more than about 5% weight natural sand.

9. (Cancelled)

10. (Currently Amended) The interlayer of claim 1, wherein said aggregate is comprised of about **[[25]]** 40% by weight to about **[[53.8]]** 70% by weight aggregate having a sieve size of less than about 1.18 mm.